BELLE MEADE AREA WATERLINE REPLACEMENTS

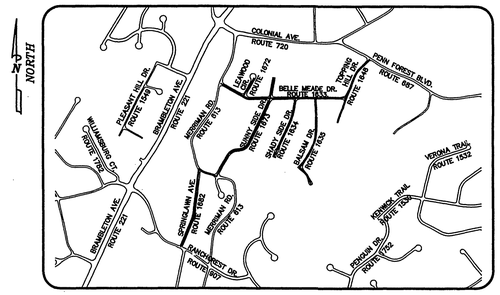
ROANOKE COUNTY, VIRGINIA

GENERAL NOTES

1. THE TOPOGRAPHIC FEATURES DEPICTED HEREON ARE TAKEN FROM THE ROANOKE COUNTY TOPOGRAPHIC RECORDS ARCHIVE. A TOPOGRAPHIC SURVEY TO PROVIDE ADDITIONAL TOPOGRAPHIC INFORMATION WAS PERFORMED BY GAY AND NEEL, INC. NOVEMEBER 2007.
2. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND THEREFORE MAY NOT INDICATE ALL ENCUMBRANCES THAT MAY AFFECT THE SUBJECT PROPERTIES.
3. LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE APPROXIMATE, BASED ON AVAILABLE SURFACE STRUCTURES, SUCH AS VALVES, MANHOLES, ETC., "MISS UTILITY" MARKINGS, AND RECORD INFORMATION. GAY AND NEEL, INC. DOES NOT WARRANT EXISTENCE OF, OR LOCATIONS OF UNDERGROUND UTILITY LINES AND/OR STRUCTURES.
4. PROPERTY LINES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. NO BOUNDARY SURVEY HAS BEEN PERFORMED AS A PART OF THIS PROJECT.
5. THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A F.E.M.A. DESIGNATED 100-YEAR FLOOD ZONE. THE SUBJECT PROPERTY LIES WITHIN ZONE "X" AS SHOWN ON F.I.R.M. COMMUNITY PANEL NO. 51161C0161G, EFFECTIVE DATE OF SEPTEMBER 28, 2007. THIS DETERMINATION HAS BEEN MADE BY GRAPHIC METHODS. NO ELEVATION STUDY HAS BEEN PERFORMED AS A PART OF THIS PROJECT.
6. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE WESTERN VIRGINIA WATER AUTHORITY (AUTHORITY) AVAILABLE AT WWW.WESTERNVAWATER.ORG OR BY CONTACTING THE AUTHORITY AT 540-853-5700. THE PROJECT SHALL ALSO COMPLY WITH THE GOVERNING JURISDICTION'S STANDARDS AND OTHER AGENCY STANDARDS (E.G., VDOT, DEQ, DCR, VDH, ETC.) WHERE APPLICABLE.
7. THE AUTHORITY WILL INSTALL ALL NEW WATER METERS AND REMOVE ALL EXISTING WATER METERS. THE CONTRACTOR SHALL INSTALL COMPLETE NEW WATER SERVICES INCLUDING THE METER SETTER AND VAULT. FOLLOWING METER REPLACEMENT BY THE AUTHORITY, THE CONTRACTOR SHALL DEMOLISH THE EXISTING WATER METER SETTER AND VAULT. THE CONTRACTOR SHALL COORDINATE EXISTING METER REMOVAL AND NEW METER INSTALLATION DIRECTLY WITH THE AUTHORITY. THE CONTRACTOR SHALL PROVIDE AT LEAST THREE (3) BUSINESS DAYS ADVANCE NOTICE TO THE AUTHORITY PRIOR TO NEEDING METER INSTALLATIONS. THE CONTRACTOR SHALL SEQUENCE CONSTRUCTION ACTIVITY TO PROVIDE A SERIES OF AT LEAST TEN (10) SERVICES THAT ARE READY TO RECEIVE NEW METERS BEFORE CONTACTING THE AUTHORITY FOR WATER METER REPLACEMENT.
8. ALL CONNECTIONS TO EXISTING WATERLINES SHALL BE PERFORMED BY THE AUTHORITY. THE CONTRACTOR SHALL PROVIDE FULL STAINLESS STEEL TAPPING SLEEVE(S) AND VALVE(S). THE CONTRACTOR SHALL EXCAVATE TO THE EXISTING WATERLINE, SHORE THE TRENCH PER OSHA REQUIREMENTS, CLEAN THE EXISTING WATERLINE, AND INSTALL THE TAPPING SLEEVE AND VALVE PRIOR TO THE AUTHORITY PERFORMING THE TAP. THE CONTRACTOR SHALL NOTIFY THE AUTHORITY'S UTILITY LINE SERVICES DIVISION AT 540-853-2792 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO REQUIRING THE CONNECTION.
9. ALL CONNECTIONS TO EXISTING SANITARY SEWERLINES SHALL BE PERFORMED BY THE AUTHORITY. THE CONTRACTOR SHALL EXCAVATE TO THE EXISTING SEWERLINE, SHORE THE TRENCH PER OSHA REQUIREMENTS, AND CLEAN THE EXISTING SEWERLINE PRIOR TO THE AUTHORITY PERFORMING THE TAP. THE CONTRACTOR SHALL NOTIFY THE AUTHORITY'S UTILITY LINE SERVICES DIVISION AT 540-853-2792 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO REQUIRING THE CONNECTION.
10. THE CONTRACTOR SHALL PERFORM ALL MANHOLE CONNECTIONS. THE CORING AND BOOT INSTALLATION SHALL BE INSPECTED AND APPROVED BY AN AUTHORITY CONSTRUCTION INSPECTOR PRIOR TO ACTIVATING SEWER SERVICE. THE CONTRACTOR SHALL CONTACT THE AUTHORITY'S CONSTRUCTION INSPECTOR RESPONSIBLE FOR THE PROJECT AT LEAST ONE (1) DAY PRIOR TO INITIATING THE MANHOLE CONNECTION.
11. PRIOR TO CONSTRUCTION IN THE RIGHT-OF-WAY, ALL APPLICABLE PERMIT(S) FROM THE GOVERNING JURISDICTION AND/OR AGENCY MUST BE OBTAINED AND A COPY KEPT ON THE PROJECT SITE.
12. FOR PROJECTS REQUIRING TRAFFIC CONTROL IN THE CITY OF ROANOKE, NOTIFY MANAGER OF TRANSPORTATION, MARK JAMISON, AT 540-853-5471 AT LEAST TWO WEEKS IN ADVANCE OF REQUIRING TRAFFIC CONTROL. FOR A LANE CLOSURE PERMIT IN THE CITY OF ROANOKE, CONTACT THE TRAFFIC ENGINEER, GARY BOWMAN, AT 540-853-5834. TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE MOST RECENT MUTCD MANUAL AND THE VDOT WORK AREA PROTECTION MANUAL UNLESS OTHERWISE SPECIFIED BY THE CITY.
13. THE CONTRACTOR SHALL NOTIFY THE AUTHORITY'S ENGINEERING COORDINATOR, CHUCK CLARK, AT 540-537-3243 AT LEAST THREE (3) DAYS PRIOR TO CONSTRUCTION.
14. A PRE-CONSTRUCTION CONFERENCE SHALL BE SCHEDULED AT LEAST ONE (1) DAY PRIOR TO ANY CONSTRUCTION.
15. THE CONTRACTOR SHALL HAVE A VALID MISS UTILITY TICKET PRIOR TO EXCAVATION. CONTACT MISS UTILITY AT 1-800-552-7001.
16. ALL EXISTING UTILITIES MAY NOT BE SHOWN OR MAY NOT BE SHOWN IN THEIR EXACT LOCATION. CONTRACTOR SHALL LOCATE ALL UTILITIES AND DETERMINE ALL INVERTS PRIOR TO CONSTRUCTION TO ALLOW FOR ADJUSTMENTS DUE TO CONFLICTS WITH OTHER UTILITIES. THE CONTRACTOR SHALL COMPLY WITH THE VIRGINIA STATE WATER WORKS REGULATIONS, SECTION 12.05.03, AND THE VIRGINIA STATE SEWAGE COLLECTION AND TREATMENT REGULATIONS WHERE LINES CROSS.
17. AN APPROVED SET OF PLANS AND PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
18. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT.
19. PRIOR TO COMMENCING WORK, THE CONTRACTOR'S CERTIFIED RESPONSIBLE LAND DISTURBER SHALL OBTAIN AN EROSION AND SEDIMENT CONTROL PERMIT FOR THE PROJECT FROM THE LOCAL GOVERNING JURISDICTION AND DCR (IF REQUIRED). ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
20. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING ALL VEHICLES AND EQUIPMENT PRIOR TO ENTERING PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE STREETS ARE KEPT IN A CLEAN, MUD- AND DUST-FREE CONDITION AT ALL TIMES.
21. FIELD CHANGES SHALL BE APPROVED BY THE AUTHORITY'S ENGINEERING DIVISION PRIOR TO SUCH CONSTRUCTION.
22. THE CONTRACTOR SHALL MAKE PROVISIONS TO PROVIDE ACCESS TO ALL PROPERTIES DURING CONSTRUCTION AND SHALL MAINTAIN SAFE ACCESSIBILITY TO FIRE HYDRANTS AT ALL TIMES.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING ALL MANHOLES AFTER PAVING. MANHOLE RIMS SHALL BE INSTALLED TO GRADE AND FLUSH WITH THE FINAL PAVEMENT.
24. UNREPAIRED ROADWAYS OPENED TO TRAFFIC SHALL HAVE, AT A MINIMUM, COMPACTED AGGREGATE MATERIAL VDOT 21A OR 21B FLUSH WITH THE ADJACENT ROADWAY SURFACE AND SHALL BE INSPECTED AND REPAIRED ON A DAILY BASIS. SOME AREAS WILL REQUIRE A TEMPORARY PATCH UNTIL FINAL PAVING CAN BE COMPLETED.
25. THE CONTRACTOR SHALL NOT EXCAVATE MORE TRENCH LENGTH THAN CAN BE RESTORED WITHIN THE SAME WORK DAY. ALL TRENCHES SHALL BE BACKFILLED OR PLATED AT THE END OF EACH WORK DAY OR WHEN THE CONTRACTOR IS NOT ON SITE.
26. THE CONTRACTOR SHALL SUPPLY THE AUTHORITY WITH CORRECT AS-BUILT PLANS BEFORE SUBSTANTIAL COMPLETION WILL BE GRANTED.
27. ALL UTILITIES TO BE MAINTAINED BY THE WESTERN VIRGINIA WATER AUTHORITY SHALL BE WITHIN DEDICATED RIGHTS-OF-WAY OR EASEMENTS.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ANY UTILITIES DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES. VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK.
29. ALL ACTIVITIES IN PUBLIC RIGHT-OF-WAY SHALL CONFORM TO VDOT WORK AREA PROTECTION MANUAL. (MOST RECENT EDITION)
30. PAVEMENT WORK WITHIN THE VDOT RIGHT-OF-WAY REQUIRES THE FOLLOWING INSPECTIONS:
    A. SUBGRADE PRIOR TO PLACEMENT OF BASE STONE
    B. BASE STONE PRIOR TO PLACEMENT OF PAVEMENT
    C. PAVEMENT
31. THE MINIMUM REQUIRED DENSITY FOR ALL COMPACTION SHALL BE 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN ±2% OF THE OPTIMUM.
32. ALL NEW WATERLINE SERVICE LATERAL INSTALLATION SHALL BE DIRECTIONAL BORED, UNLESS CONDITIONS DICTATE OTHERWISE.

WESTERN VIRGINIA WATER AUTHORITY NOTES: WATERLINE NOTES

1. A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED LINES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING VALVE VAULTS, MANHOLE COVERS, ETC., AFTER PAVING AND ADJUSTMENT TO FINAL GRADE IF NECESSARY.
3. ALL EXISTING UTILITIES MAY NOT BE SHOWN, OR MAY NOT BE SHOWN IN THE EXACT LOCATION. THE CONTRACTOR SHALL COMPLY WITH STATE WATER WORKS REGULATIONS, SECTION 12.05.03, WHERE LINES CROSS.
4. ALL TRENCHES IN EXISTING OR FUTURE HIGHWAY RIGHTS-OF-WAY SHALL BE COMPACTED ACCORDING TO WESTERN VIRGINIA WATER AUTHORITY STANDARDS.
5. LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.
6. ALL WATER MAINS UNDER A WORKING PRESSURE OF 100 PSI OR GREATER MUST BE DUCTILE IRON. FITTINGS MUST ADDRESS HIGH PRESSURE, IF APPLICABLE.
7. ALL WATER METERS SHALL BE ¾" METERS, UNLESS OTHERWISE NOTED.
8. FOR THIS PROJECT, ALL WATER SERVICES SAHLL BE "TYPE A" UNLESS OTHERWISE NOTED.
9. CONTRACTOR SHALL SECURE PERMISSION TO WORK ON PRIVATE PROPERTY WHEN NECESSARY TO CONNECT NEW WATER SERVICES TO EXISTING SERVICE LINES.



VICINITY MAP
SCALE: 1"=1000'

APPROVAL & ACCEPTANCE:

Robert W. Benningfield 5/28/09
APPROVED FOR CONSTRUCTION DATE

LEGEND:

	LIMITS OF DISTURBANCE LINE	TELE PED	EXISTING TELEPHONE PEDESTAL
	PROPERTY LINE	GV	EXISTING GAS VALVE
2100	EXISTING 2' CONTOURS	GM	EXISTING GAS METER
1200	PROPOSED 2' CONTOURS	LP	EXISTING LIGHT POLE
x 90.56	EXISTING SPOT ELEVATION		EXISTING WELL
x 90.56	PROPOSED SPOT ELEVATION		DRILL HOLE
90.56 / 90.56	PROPOSED TOP CURB ELEVATION / PROPOSED BOTTOM CURB ELEVATION		EXISTING FIRE HYDRANT
8"S	EXISTING SANITARY SEWER		PROPOSED FIRE HYDRANT
	PROPOSED SANITARY SEWER	WV	EXISTING WATER VALVE
6"W	EXISTING WATERLINE		PROPOSED WATER VALVE
	PROPOSED WATERLINE	WM	EXISTING WATER SERVICE
24"	EXISTING STORM SEWER		PROPOSED WATER SERVICE
	PROPOSED STORM SEWER	CO	EXISTING SEWER CLEANOUT
	EXISTING EDGE OF PAVEMENT		PROPOSED SEWER CLEANOUT
	PROPOSED PAVEMENT	SMH	EXISTING SEWER MANHOLE
	PROPOSED GRAVEL		PROPOSED SEWER MANHOLE
	PROPOSED CONCRETE/SIDEWALK		EXISTING SHRUB
	EXISTING BUILDING		EXISTING TREE
	PROPOSED BUILDING		PROPOSED TREE
OHE	EXISTING OVERHEAD ELECTRIC		EXISTING SIGN
UGE	EXISTING BURIED ELECTRIC		PROPOSED SIGN
TV	EXISTING BURIED CABLE TV LINE	TP	BORE HOLE/TEST PIT
G	EXISTING GAS LINE		CONTROL POINT
TEL	EXISTING BURIED TELEPHONE LINE	IRF	IRON ROD FOUND
	EXISTING FENCE LINE	IRS	IRON ROD SET
	EXISTING TREELINE		PROPERTY CORNER
	BENCHMARK LOCATION	FP	FENCE POST
U.P.	EXISTING UTILITY POLE	(TBR)	TO BE REMOVED
	EXISTING GUY WIRE	MB	EXISTING MAILBOX

ABBREVIATION LEGEND:

@	AT	LB.	POUND
A/C	AIR CONDITIONER	M	METER
AC.	ACRE(S)	M.B.L.	MINIMUM BUILDING LINE
ALT.	ALTERNATE	MAG.	MAGISTERIAL
APPROX.	APPROXIMATE	MAX.	MAXIMUM
AVG.	AVERAGE	MB	MAIL BOX
B.M.	BENCHMARK	MH	MANHOLE
BC	BOTTOM OF CURB	MI.	MILE
BLVD.	BOULEVARD	MIN.	MINIMUM
BSMT	BASEMENT	MON.	MONUMENT
BW	BOTTOM OF WALL	MTL.	METAL
C.F.	CUBIC FEET	N.I.C.	NOT IN CONTRACT
C.I.	CURB INLET	N.S.	NORFOLK & SOUTHERN
C.M.U	CONCRETE MASONRY UNIT	N.T.S.	NOT TO SCALE
C.V.	CHECK VALVE	N/F	NOW OR FORMERLY
C.Y.	CUBIC YARD	NB.	NORTHBOUND LANE
CAL.	CALIPER	NO./#	NUMBER
CATV	CABLE TELEVISION	NRV	NEW RIVER VALLEY
CHD	CHORD	O.D.	OUTSIDE DIAMETER
CMP	CORRUGATED METAL PIPE	O.F.C.I.	OWNER FURNISHED CONTRACTOR INSTALLED
CO	CLEAN-OUT	OH	OVERHEAD
CO.	COUNTY	OHE	OVERHEAD ELECTRIC
CONC.	CONCRETE	P.B.	PLAT BOOK
CRK.	CREEK	P.U.	PUBLIC UTILITY
D.B.	DEED BOOK	P.U. & D.E.	PUBLIC UTILITY AND DRAINAGE EASEMENT
D.E.	DRAINAGE EASEMENT	P.U.E.	PUBLIC UTILITY EASEMENT
D.I.	DROP INLET	PE	POLYETHYLENE
D.I.P.	DUCTILE IRON PIPE	PED.	PEDESTAL
D.S.	DOWN SPOUT	PG.	PAGE
DECID.	DECIDUOUS	PROP.	PROPOSED
DEG.	DEGREES	PSI	POUNDS PER SQUARE INCH
DET.	DETAIL	PVC	POLYVINYLCHLORIDE
DFC	DRAINFIELD CORNER	PVMT	PAVEMENT
DI	DROP INLET	R	RADIUS
DIA.	DIAMETER	R.R.	RAILROAD
DIST.	DISTRICT	R/W	RIGHT-OF-WAY
DR.	DRIVE	RCP	REINFORCED CONCRETE PIPE
DWG.	DRAWING	RD.	ROAD
DWLG	DWELLING	REF.	REFERENCE
E.G.	EDGE OF GRAVEL	REQ'D	REQUIRED
E.P.	EDGE OF PAVEMENT	RET.	RETAINING
EA.	EACH	REV.	REVISION
EBL	EASTBOUND LANE	RTE.	ROUTE
ELEV.	ELEVATION	RWY.	RAILWAY
EOW	EDGE OF WATER	S.D.	STORM DRAIN
ESMT.	EASEMENT	SDMH	STORM DRAIN MANHOLE
EVG.	EVERGREEN	S.F.	SQUARE FEET
EXIST.	EXISTING	SB.	SOUTHBOUND LANE
EXT.	EXTENSION	SCH	SCHEDULE
F.E.M.A.	FEDERAL EMERGENCY MANAGEMENT AGENCY	SHT.	SHEET
F.H.	FIRE HYDRANT	SPEC.	SPECIFICATION
F.I.R.M.	FLOOD INSURANCE RATE MAP	SPTK	SEPTIC TANK
F/L	FLOW LINE	SSEW	SANITARY SEWER
FF	FINISH FLOOR	SSMH	SANITARY SEWER MANHOLE
FND	FOUND	ST.	STREET
FR	FRAME	STA.	STATION
FT.	FEET	STD.	STANDARD
G.M.	GAS METER	STY.	STORY
G.V.	GATE VALVE	SWME	STORMWATER MANAGEMENT EASEMENT
GNI	GAY AND NEEL, INC.	SWMF	STORMWATER MANAGEMENT FACILITY
GPM	GALLONS PER MINUTE	TC	TOP OF CURB/CONCRETE
GRAV.	GRAVEL	TCP	TERRA COTTA PIPE
GRD	GROUND	TEL.	TELEPHONE
HP	HIGH POINT	TOB	TOP OF BANK
H.U.D.	HOUSING AND URBAN DEVELOPMENT	TOS	TOP OF SLOPE
H/C	HANDICAPPED	TW	TOP OF WALL
HCR	HANDICAPPED RAMP	TYP.	TYPICAL
HDPE	HIGH DENSITY POLYETHYLENE PIPE	U.G.	UNDERGROUND
HR	HANDRAIL	U.P.	UTILITY POLE
HW	HEADWALL	U.S.	UNITED STATES
HYD.	HYDRANT	VA.	VIRGINIA
I.D.	INSIDE DIAMETER	VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
IN.	INCH	VESCH	VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK
INST.	INSTRUMENT	W.B.	WILL BOOK
INT.	INTERSECTION	W.W.F.	WELDED WIRE FABRIC
INV.	INVERT	W/	WITH
INVin	INVERT IN	WBL	WESTBOUND LANE
INVout	INVERT OUT	WM	WATER METER
L.F.	LINEAR FOOT	WTNK	WATER TANK
LP	LIGHT POLE	WV	WATER VALVE
L.P.	LOW POINT	WW	WOVEN WIRE
L.S.I.	LANDSCAPED ISLAND	XFMR	TRANSFORMER

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5	BELLE MEADE DRIVE (B) & SUNNY SIDE DRIVE (B)
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7	BALSAM DRIVE
8	MERRIMAN ROAD & LEAWOOD CIRCLE
9	SPRINGLAWN AVENUE
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11	WVWA DETAILS (2 OF 2)
12	VDOT DETAILS

GENERAL EROSION & SEDIMENT CONTROL NOTES:

ES-1: UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS, WITH MOST PARTICULAR ATTENTION BEING PAID TO THE FOLLOWING MINIMUM STANDARDS:

MS-1
PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

MS-2
DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.

MS-3
A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE, AND WILL INHIBIT EROSION.

MS-4
SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY, AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.

MS-16
UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

MS-17
WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR ROAD SURFACE. THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.

MS-18
ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FUTHER EROSION AND SEDIMENTATION.

ES-2: THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

ES-3: ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.

ES-4: A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

ES-5: PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.

ES-6: THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.

ES-7: ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.

ES-8: DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.

ES-9: THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

VE&SCH STD 3.05, SILT FENCE, TO BE INSTALLED DOWNSLOPE OF ALL EARTH DISTURBING ACTIVITY, AND AS SHOWN ON PLANS.

GAY AND NEEL, INC.
CIVIL ENGINEERING
LAND PLANNING
SURVEYING
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Phone: (540) 345-1110 Fax: (540) 345-5560
Email: info@gayandneel.com

Cover Sheet

Belle Meade Area Waterline Replacements
Roanoke County, Virginia

COMMONWEALTH OF VIRGINIA
RICHARD C. MURPHY
Lic. No. 041898
05/22/09
PROFESSIONAL ENGINEER

REVISED:
02/11/08
05/29/09

DESIGNED/CALC.:	MPT
CHECKED:	
DRAWN:	MPT
SCALE:	N/A
DATE:	01/14/08

JOB NO. 1882.0

SHEET 1 OF 12